Distributed by:

JAMECO® ELECTRONICS

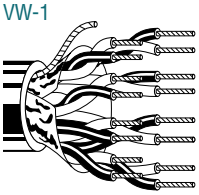
www.Jameco.com ✦ 1-800-831-4242

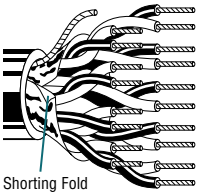
The content and copyrights of the attached material are the property of its owner.

Overall Beldfoil® Shield

High-Temperature Control and Instrumentation Cables and Computer Cables for EIA RS-232 Applications

Jameco Part Number 232514 (9504-060-100)

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
20 AWG Stranded Conductors (7x28) • Tinned Copper • Pairs Cabled Together • Overall 100% Beldfoil Aluminum-Kapton® Shield • Drain Wire																		
Tefzel® Insulation • Clear Tefzel Material Jacket																		
High-Temperature 300V RMS, 150°C VW-1 	**85164**		4	Black & Red, Black & White, Black & Green, Black & Blue	100 500† 1000†	30.5 152.4 304.8	8.4 37.0 71.0	3.8 16.8 32.3	.015	.38	.025	.64	.344	8.74	23	75	40	131
	85168		8	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange, Red & White	100 500† 1000†	30.5 152.4 304.8	13.5 62.0 126.0	6.1 28.2 57.3	.015	.38	.025	.64	.439	11.15	23	75	40	131

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
24 AWG Stranded Conductors (7x32) • Tinned Copper • Twisted Pairs • Overall 100% Beldfoil Shield • 24 AWG Stranded TC Drain Wire																		
Semi-rigid PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80°C) CSA AWM I A  Shorting Fold	**9501**	NEC: CMG CEC: CMG FT4	1	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	2.1 7.5 7.0 14.0 14.0	1.0 3.4 3.2 6.4 6.4	24.0Ω/M′ 78.7Ω/km	18.0Ω/M′ 59.1Ω/km	.156	3.96	75	60%	40	131	74	243
	9502††	NEC: CMG CEC: CMG FT4 P-MSHA-SC-7K-182037	2	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000 10000	30.5 U-152.4 152.4 U-304.8 304.8 3048.0	3.7 14.5 15.0 28.0 29.0 290.0	1.7 6.6 6.8 12.7 13.2 131.8	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.222	5.64	75	60%	30	98	50	164
	9503	NEC: CMG CEC: CMG FT4	3	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.9 14.5 15.0 29.0 29.0	1.8 6.6 6.8 13.2 13.2	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.232	5.89	75	60%	30	98	50	164
	9504	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.5 17.5 18.0 35.0 35.0	2.0 8.0 8.2 15.9 15.9	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.265	6.73	75	60%	30	98	50	164
	9505	NEC: CMG CEC: CMG FT4	5	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	5.5 22.0 22.5 43.0 44.0	2.5 10.0 10.2 19.5 20.0	24.0Ω/M′ 78.7Ω/km	17.0Ω/M′ 55.8Ω/km	.289	7.34	75	60%	30	98	50	164

For Plenum version of 9502, see 82502.

For Plenum versions of 9503, see 89503 or 82503.

For Plenum versions of 9504, see 89504 or 82504.

For Plenum versions of 9505, see 89505 or 82505.

DCR = DC Resistance • TC = Tinned Copper

* Capacitance between conductors.
** Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary ±10% from length shown.
†† Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration certification. Request quotations of RG/U cables not listed.

See Attenuation, Rise Time and Bit Rate data for this series on page 5.10.

Tefzel and Kapton are DuPont trademarks.

Belden® Color Code Charts

Color Code Chart No. 1

Cond. No.	Color
1	Black
2	White
3	Red
4	Green
5	Brown
6	Blue
7	Orange
8	Yellow
9	Purple
10	Gray
11	Pink
12	Tan

18 Gage conductors in cables 8446 through 8449 are Black and White.

Color Code Chart Nos. 2 and 2R — ICEA (Insulated Cable Engineers Association) Standard*

Cond. No.	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
7	White/Black Stripe
8	Red/Black Stripe
9	Green/Black Stripe
10	Orange/Black Stripe
11	Blue/Black Stripe
12	Black/White Stripe
13	Red/White Stripe

Cond. No.	Color
14	Green/White Stripe
15	Blue/White Stripe
16	Black/Red Stripe
17	White/Red Stripe
18	Orange/Red Stripe
19	Blue/Red Stripe
20	Red/Green Stripe
21	Orange/Green Stripe
22	Black/White/Red
23	White/Black/Red
24	Red/Black/White
25	Green/Black/White
26	Orange/Black/White

Cond. No.	Color
27	Blue/Black/White
28	Black/Red/Green
29	White/Red/Green
30	Red/Black/Green
31	Green/Black/Orange
32	Orange/Black/Green
33	Blue/White/Orange
34	Black/White/Orange
35	White/Red/Orange
36	Orange/White/Blue
37	White/Red/Blue
38	Black/White/Green
39	White/Black/Green

Cond. No.	Color
40	Red/White/Green
41	Green/White/Blue
42	Orange/Red/Green
43	Blue/Red/Green
44	Black/White/Blue
45	White/Black/Blue
46	Red/White/Blue
47	Green/Orange/Red
48	Orange/Red/Blue
49	Blue/Orange/Red
50	Black/Orange/Red

* 2 = Spiral Stripe
2R = Ring Band Striping

Color Code Chart No. 3 for Paired Cables (Belden Standard)

Pair No.	Color Combination
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green
10	Red & Blue

Pair No.	Color Combination
11	Red & Yellow
12	Red & Brown
13	Red & Orange
14	Green & White
15	Green & Blue
16	Green & Yellow
17	Green & Brown
18	Green & Orange
19	White & Blue
20	White & Yellow

Pair No.	Color Combination
21	White & Brown
22	White & Orange
23	Blue & Yellow
24	Blue & Brown
25	Blue & Orange
26	Brown & Yellow
27	Brown & Orange
28	Orange & Yellow
29	Purple & Orange
30	Purple & Red

Pair No.	Color Combination
31	Purple & White
32	Purple & Dark Green
33	Purple & Light Blue
34	Purple & Yellow
35	Purple & Brown
36	Purple & Black
37	Gray & White

Color Code Chart No. 4 for Paired Cables

Pair No.	Color Combination
1	White & Blue
2	White & Orange
3	White & Green
4	White & Brown
5	White & Gray

Pair No.	Color Combination
6	Red & Blue
7	Red & Orange
8	Red & Green
9	Red & Brown
10	Red & Gray

Pair No.	Color Combination
11	Black & Blue
12	Black & Orange
13	Black & Green
14	Black & Brown
15	Black & Gray

Pair No.	Color Combination
16	Yellow & Blue
17	Yellow & Orange
18	Yellow & Green
19	Yellow & Brown
20	Yellow & Gray

Pair No.	Color Combination
21	Violet & Blue
22	Violet & Orange
23	Violet & Green
24	Violet & Brown
25	Violet & Gray

Color Code Chart No. 5 for Paired Cables (Western Electric Standard)

Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe
5	White/Gray Stripe & Gray/White Stripe

Pair No.	Color Combination
6	Red/Blue Stripe & Blue/Red Stripe
7	Red/Orange Stripe & Orange/Red Stripe
8	Red/Green Stripe & Green/Red Stripe
9	Red/Brown Stripe & Brown/Red Stripe
10	Red/Gray Stripe & Gray/Red Stripe

Pair No.	Color Combination
11	Black/Blue Stripe & Blue/Black Stripe
12	Black/Orange Stripe & Orange/Black Stripe
13	Black/Green Stripe & Green/Black Stripe
14	Black/Brown Stripe & Brown/Black Stripe
15	Black/Gray Stripe & Gray/Black Stripe

Pair No.	Color Combination
16	Yellow/Blue Stripe & Blue/Yellow Stripe
17	Yellow/Orange Stripe & Orange/Yellow Stripe
18	Yellow/Green Stripe & Green/Yellow Stripe
19	Yellow/Brown Stripe & Brown/Yellow Stripe
20	Yellow/Gray Stripe & Gray/Yellow Stripe

Pair No.	Color Combination
21	Purple/Blue Stripe & Blue/Purple Stripe
22	Purple/Orange Stripe & Orange/Purple Stripe
23	Purple/Green Stripe & Green/Purple Stripe
24	Purple/Brown Stripe & Brown/Purple Stripe
25	Purple/Gray Stripe & Gray/Purple Stripe